

SINGLE PHASE INDUCTION MOTOR WITH PARTIALLY SHARED WINDINGS

ABSTRACT OF THE DISCLOSURE

A single phase, three-speed induction motor having 4, 6, and 8-pole speed configurations. In one embodiment, the motor is constructed and arranged to be used in connection with a washing machine. The 8-pole speed winding shares a portion of the 4-pole speed winding, but not all of the 4-pole speed winding is used in the 8-pole configuration. In one embodiment, the 4-pole speed winding includes four winding portions and the 8-pole speed configuration uses two of the four winding portions without the need for additional switch contacts to reconfigure the motor for operating in the 4-pole mode or the 6-pole mode. In one embodiment, shared winding portions are wound on the stator core in a generally non-sinusoidal distribution and non-shared winding portions are wound on the stator core in a generally sinusoidal distribution.